AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-29. (Cancelled)

30.   (New) A method for controlling a fluid pump in a perfusion system, comprising the following steps:

(i)   establishing a setpoint for an operating parameter of the pump;

(ii)   controlling the speed of the pump to maintain operation at said established setpoint;

(iii)   detecting an alarm condition;

(iv)   automatically reducing the speed of the pump in response to said alarm condition and establishing a new setpoint for said operating parameter that corresponds to the reduced speed; and

(v)   controlling the speed of the pump to maintain operation at said new setpoint.

31.   (New) The method of claim 30, wherein the speed of the pump is reduced in step (iv) by a predetermined percentage of the current operating speed.

32.   (New) The method of claim 31, wherein said percentage is varied in

dependence upon the amount that ᵗʰᵉ detected condition exceeds a predetermined level for said

condition.

33.   (New) The method of claim 31, further including the step of repeating steps

(iii) - (v) to iteratively reduce the setpoint by said percentage, until a detected condition

reaches an acceptable level.

34.   (New) The method of claim 33, wherein the time period between successive

iterations is varied in dependence upon the amount that said detected condition exceeds said

acceptable level.

35.   (New) The method of claim 30, wherein the speed of the pump is reduced in

step (iv) by a predetermined number of revolutions per minute.

36.   (New) The method of claim 30, wherein the speed of the pump is reduced in

step (iv) to a fixed value.

37.   (New) The method of claim 30, wherein said operating parameter is fluid

flow rate.

38.   (New) The method of claim 30, wherein said operating parameter is fluid pressure.

39.   (New) The method of claim 30, wherein said setpoint is manually established by a user in step (i).

40.   (New) The method of claim 30, wherein said alarm condition is based on fluid flow rate.

41.   (New) The method of claim 30, wherein said alarm condition is based on fluid pressure.

42.   (New) The method of claim 30, further including the step of generating an alert signal to indicate that the speed of the pump has been automatically reduced.

43.   (New) A perfusion system, comprising:

a fluid pump;

a controller that controls the speed of said pump to maintain an operating parameter of the perfusion system at a setpoint value;

a sensor that detects an alarm condition in the perfusion system; and

means responsive to the alarm condition for automatically reducing the setpoint value for said controller, to thereby cause the controller to operate the pump at a reduced speed.

44. (New) The perfusion system of claim 43, wherein said setpoint value reducing means causes the controller to reduce the speed of the pump by a predetermined percentage of its current operating speed.

45. (New) The perfusion system of claim 44, wherein said setpoint value reducing means iteratively reduces said setpoint value by said percentage until a detected condition reaches an acceptable level.

46. (New) The perfusion system of claim 43, wherein said setpoint value reducing means causes the controller to reduce the speed of the pump by a predetermined number of revolutions per minute.

47. (New) The perfusion system of claim 43, wherein said setpoint value reducing means causes the controller to reduce the speed of the pump to a fixed value.

48. (New) The perfusion system of claim 43, wherein said operating parameter is fluid flow rate.

49.   (New) The perfusion system of claim 43, wherein said operating parameter

is fluid pressure.

50.   (New) The perfusion system of claim 43, further including means for

generating an alert signal to indicate that the setpoint value has been automatically reduced.